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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,460	09/18/2003	Ashish Dubey	2033.66885	4335
24978	7590	12/16/2004		
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			EXAMINER EDWARDS, LAURA ESTELLE	
			ART UNIT 1734	PAPER NUMBER

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,460

Applicant(s)

DUBEY ET AL.

Examiner

Laura Edwards

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,13 and 14 is/are rejected.
- 7) ☒ Claim(s) 3,6-12 and 15-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>122203</u> . | 6) <input type="checkbox"/> Other: ____ |

Specification

The disclosure is objected to because of the following informalities: on pages 1, 11, and 13, Applicants need to update the history of the related files with appropriate serial numbers and any corresponding patent numbers.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Fisher et al (US 2,276,244).

Fisher et al teach a feed apparatus for use in depositing an adhesive based slurry composition upon a moving web having a direction of travel comprising a main metering roll (13); a companion roll (14) disposed in closely spaced relation to said metering roll to form a nip therebetween; said nip constructed and arranged to retain a pool (15) of the slurry; and means (not shown but evidenced by arrows indicating the same direction of rotation) for driving said rolls so that slurry retained in said nip progresses over an upper outer peripheral surface of said metering roll to be deposited upon the web.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al (US 2,276,244) in view of Schaefer (US 3,640,245).

The teachings of Fisher et al have been mentioned above but Fisher et al fail to teach or suggest end walls for pool of coating material. However, it was known in the art, at the time the invention was made, to provide a pool of material with end walls or end seals to prevent leakage of the material about sides of the two nip rolls forming a sump or pool of coating material as evidenced by Schaefer (see col. 2, lines 50-55). It would have been obvious to one of ordinary skill in the art to provide end walls or end seals as taught by Schaefer about the pool or sump of material in the Fisher et al apparatus in order to provide a reservoir or cavity for the coating material in which the material would not leak about the sides of the two nip rolls.

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Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al (US 2,276,244) in view of Klein (US 4,287,846).

The teachings of Fisher et al have been mentioned above but Fisher et al fail to teach or suggest using a non-stick resilient surface on the nip rolls. However, it was known in the coating art, at the time the invention was made, to provide TEFLON on at least one nip roll when using adhesive or tacky coating material because of the known release properties of the TEFLON as evidenced by Klein (see col. 2, lines 47-51). It would have been obvious to one of ordinary skill in the art to provide TEFLON as taught by Klein on at least one or more of the nip rolls used by Fisher et al in order to prevent the adhesive coating material from adhering to the rolls. The use of TEFLON on both of the nips of Fisher et al is within the purview of one skilled in the art so as to minimize clumping of the adhesive material on the rolls and coating material waste.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al (US 2,276,244) in view of Reafler (US 5,132,148).

The teachings of Fisher et al have been mentioned above but Fisher et al fail to teach or suggest using a stainless steel surface on the nip rolls. However, it was known in the coating art, at the time the invention was made, to use stainless steel nip rolls when using adhesive or tacky coating material because of the durability of the stainless steel as evidenced by Reafler (see col. 17, lines 44-46). It would have been obvious to one of ordinary skill in the art to provide stainless steel as the material used to make the nip rolls used by Fisher et al in order to provide rolls with a long lifetime. The use of stainless steel for the nip rolls of Fisher et al is within the purview of one skilled in the art so as to provide for a durable applicator system.

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Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al (US 2,276,244) in view of Kohler et al (US 6,068,701).

The teachings of Fisher et al have been mentioned above and while Fisher et al recognize the use of a removable doctor device (17) on the metering roll, Fisher et al fail to teach or suggest the use of a metering wire on the metering roll. However, it was known in the coating art, at the time the invention was made, to provide a removable wire based doctoring device on a nip roll in order to smooth out adhesive coating on a moving web as evidenced by Kohler et al (see col. 6, lines 16-30). It would have been obvious to one of ordinary skill in the art to provide the removable wire based doctoring device as taught by Kohler et al in the Fisher et al apparatus in order to smooth out the coating and provide for uniform film of material to be applied to the moving web.

Allowable Subject Matter

Claims 3, 6-9, 10-12, 15-19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 would be allowable because there is no teaching or suggestion in the prior art of a feed apparatus for use in depositing a slurry upon a moving web having a direction of travel, comprising the combination of a main metering roll; a companion roll disposed in closely spaced relation to said metering roll to form a nip therebetween; said nip constructed and arranged to retain a supply of the slurry; means for driving said rolls so that slurry retained in said nip progresses over an upper outer peripheral surface of said metering roll to be deposited upon the

web, and at least one sidewall disposed closely adjacent respective ends of said rolls for forming a slurry reservoir above said nip wherein said sidewalls are made of a non-stick material.

Claims 6-9 would be allowable because there is no teaching or suggestion in the prior art of a feed apparatus for use in depositing a slurry upon a moving web having a direction of travel, comprising the combination of a main metering roll; a companion roll disposed in closely spaced relation to said metering roll to form a nip therebetween; said nip constructed and arranged to retain a supply of the slurry; means for driving said rolls so that slurry retained in said nip progresses over an upper outer peripheral surface of said metering roll to be deposited upon the web, and a thickness control roll disposed in close operational proximity to said metering roll for controlling the thickness of the slurry layer deposited upon the web by said apparatus.

Claims 10-12 would be allowable because there is no teaching or suggestion in the prior art of a feed apparatus for use in depositing a slurry upon a moving web having a direction of travel, comprising the combination of a main metering roll; a companion roll disposed in closely spaced relation to said metering roll to form a nip therebetween; said nip constructed and arranged to retain a supply of the slurry; means for driving said rolls so that slurry retained in said nip progresses over an upper outer peripheral surface of said metering roll to be deposited upon the web, and a reciprocating slurry delivery mechanism constructed and arranged for providing slurry to said nip.

Claims 15-19 would be allowable because there is no teaching or suggestion in the prior art of a feed apparatus for use in depositing a slurry upon a moving web having a direction of travel, comprising the combination of a main metering roll; a companion roll disposed in closely spaced relation to said metering roll to form a nip therebetween, said rolls being disposed

generally transversely to the direction of travel of the web; said nip constructed and arranged to retain a supply of the slurry; a thickness control roll disposed in operational relationship to said metering roll for controlling thickness of a layer of slurry drawn from said nip upon an outer surface of said metering roll; and means for driving said metering roll, said companion roll and said thickness control roll in the same direction.

Claim 20 would be allowable because there is no teaching or suggestion in the prior art of a feed apparatus for use in depositing a slurry upon a moving web having a direction of travel, comprising the combination of a main metering roll; a companion roll disposed in closely spaced relation to said metering roll to form a nip therebetween, said rolls being disposed generally transversely to the direction of travel of the web; said nip constructed and arranged to retain a supply of the slurry; a pair of sidewalls located adjacent ends of said metering and companion rolls to form a slurry reservoir; a thickness control roll disposed in operational relationship to said metering roll for controlling thickness of a layer of slurry drawn from said nip upon an outer surface of said metering roll; means for driving said rolls in the same direction so that slurry retained in said nip progresses over an upper outer peripheral surface of said metering roll to be deposited upon the web; and a reciprocating slurry delivery mechanism for providing slurry to said reservoir.

Conclusion

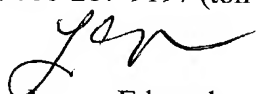
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patent discloses the state of the art with respect to apparatus for making concrete or gypsum based products: Teare (US 4,298,413) and Phillips et al (5,718,797).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura Edwards
Primary Examiner
Art Unit 1734

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December 13, 2004